ODP-82-1760
8 December 1982

82-2729/5

MEMORANDUM FOR: Chief, Management Staff, DDA

25X1 FROM: [redacted]
Chief, Management Staff, ODP

SUBJECT: ODP Annual Report for 1982

REFERENCE: Multiple Addressee Memorandum, from Mr. Harry Fitzwater, DDA, dated 12 November 1982 Subject: DCI's Annual Report to Congress, DDA 82-2729/1

As you requested in the reference, I am forwarding the ODP Annual Report for 1982. If there are any questions or comments, 25X1 please feel free to contact [redacted] of my staff.

25X1 [redacted] may be reached on [redacted]

Attachment: a/s

25X1 SECRET

This memorandum is U/AIUO when separated from attachment.

[redacted]

08 DEC 1982

1982 ANNUAL REPORT
OFFICE OF DATA PROCESSING

I. ODP 1982 OVERVIEW

The year 1982 was a productive and exciting one for the Office of Data Processing (ODP). Significant progress was made in satisfying the ever expanding ADP requirements of ODP's CIA and Intelligence Community customers. The automatic data processing (ADP) environment continued to change at an exploding rate. The capabilities and benefits of new technologies, such as office automation, networking and personal computers, were common knowledge and discussed routinely by managers and in the media. At the same time, the importance and role of the Agency in national security affairs continued to be enhanced. ODP customers had rising expectations and looked to ADP technology to solve many of their productivity and effectiveness problems. This presented challenges and opportunities in 1982. We foresee a similar situation throughout the Eighties. ODP hopes to play a key role in bringing the benefits of ADP technology to its Agency and Intelligence Community customers.

The key ODP accomplishment of 1982 was the redirection of the joint CIA-DIA SAFE program. The redirection of SAFE emphasized the use of IBM-compatible hardware in lieu of Burroughs hardware, the increased use of commercially available and Government-owned software and an evolutionary approach to development. "Early Capability" is scheduled for March 1983 with Pilot Mail Operation (PMO) software installed on recently purchased dedicated SAFE processors in the Northside Computer Center. Support will initially be made available to three hundred DDI analysts. Shortly after CIA Early Capability, an equivalent capability will be provided DIA from another group of dedicated new processors in the Northside Center.

ODP also made significant strides in office automation in 1982. A major contract for word processing and office automation equipment was competitively awarded to Wang Laboratories. ODP established a branch to centrally manage the introduction and support of these systems. Significant progress was also made in making the AIM electronic mail system, which runs on VM timesharing, available to the user community.

Software development activities continued at a rapid pace in 1982. CAMS2 development achieved two major milestones, Preliminary System Design and Detail System Design. The CAMS

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25X1 development computer center at [redacted] was furnished with a Government-owned IBM 370/168 computer. ODP personnel provide operations support to this center twelve hours per day. Progress was also made in other major development activities, such as LIMS, DESIST and ACIS. A quality assurance contractor was competitively selected for LIMS and a competition for a development contractor is in progress. A competitively-awarded system development contract was signed for DESIST. The Detailed Systems Requirements Document was completed for the ACIS Project.

Two other ODP projects reached important milestones. ADSTAR was installed and accepted by OCR and a duplicate system is undergoing testing with the DDO. An IBM 370/158 AP computer was moved to a new separate Headquarters computer center which will support the 4C system. A March 1983 IOC is planned for service to the Intelligence Community.

Processing activities also continued at a very rapid rate. The last of the older IBM 370/168's was removed from [redacted] 25X1
Three new technology IBM 3081 processors were installed 25X1
25X1 in [redacted] in addition to significant quantities of high-reliability, space-efficient IBM 3380 disk drives. This significant infusion of new technology should improve the response time and availability of ODP services. Another major achievement of Processing was the readying of the Northside Computer Center for the SAFE Early Capability IOC. By early 1983, six IBM 3083J mainframes and associated peripheral, communications and T-Bar switching equipment will be installed. Major software enhancements were also completed: a version of GIMS that runs under VM was delivered in support of CAMS; TADS was converted to run under the current version of the VM operating system; new releases were provided for major ODP operating systems.

Production statistics in 1982 showed a generally upward trend. In particular, concurrent VM users increased significantly, necessitating a splitting of the VM workload between two processors. Availability also improved, exceeding 98% for VM, Batch and CAMS.

Finally, in Congress, a major milestone was achieved. The Agency succeeded in obtaining an exemption from the Brooks Bill (P.L. 89-306), the legislation that governs ADP procurement and management in the Federal Government. This should significantly improve security and management flexibility in our future ADP activities.

ODP's relationships with its customers were excellent in 1982. We are fortunate in that we have always maintained generally harmonious relationships with internal CIA customers as well as external customers such as DIA (SAFE) and the Intelligence Community Staff (CAMS).

ODP requirements continue to increase. Our projected resource needs for upcoming fiscal years show growth primarily in the personnel area and for hardware enhancements. During Fiscal
25X1 Year 1983 and 84, approximately [redacted] additional personnel will be required for new applications development tasks and SAFE and CAMS operations support. On the hardware side, continuing growth in workload and availability requirements will necessitate five mainframe acquisitions with associated peripherals.

An additional important resource is the availability of physical space, both office and computer-grade. Though often overlooked or downplayed, it is essential that space requirements be satisfied if ODP is to be responsive to the expanding workload. Last, but perhaps most important, is the people resource. A major challenge of the Eighties will be to recruit, retain and train a highly skilled and motivated complement of ADP professionals.

II. BACKGROUND

The Office of Data Processing is responsible for providing data processing services for the CIA and certain elements of the Intelligence Community. It consists of three operational components: Processing, which is responsible for the management and operation of three large Headquarters computer centers, a smaller specialized Headquarters center (4C), and one center
25X1 located in [redacted] --- in addition, the role of management of the Agency office automation program was assigned to Processing during 1982; Applications, which is the major applications programming organization within CIA; and the Special Projects Staff --- this staff manages large system acquisition projects such as the joint CIA-DIA SAFE (Support for the Analysts' File Environment) Project.

The ODP computer center environment is extremely dynamic and
25X1 complex. [redacted] where general-purpose Agency computing is performed, ended 1982 with a total of six large scale IBM-compatible mainframe computers and 117 billion bytes (i.e., "characters") of on-line storage. Support to the Directorate of Operations is provided from the Special Center. In addition, the Special Center houses the COMIREX Automated Management System (CAMS), which is the processing segment computer system for the imagery side of the National Reconnaissance Program. The Special Center, at the close of 1982, had four IBM-compatible mainframes and 47 billion bytes of on-line storage. The third center, the Northside or SAFE Center, is currently being configured to support the Early Capability delivery of Project SAFE. By early 1983, six large IBM mainframes, 38 billion bytes of on-line storage, and associated peripherals will be installed. (Table I presents a summary of ODP computer facilities and associated ADP resources.)

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The Processing component of ODP is responsible for the management and operation of the above three centers and two smaller ones (4C and [redacted]. Approximately [redacted] full-time personnel are involved in these tasks.

In April 1982, Applications was reorganized into four major divisions: CAMS, Systems Development Division, Systems Support Division and Quality Assurance Division. This realignment of resources separates developmental from support (software maintenance) resources and establishes a formal quality assurance program. Applications operated with approximately 100 full-time staff personnel in 1982 and maintained an additional cadre of 30 personnel on rotation to other Agency components.

The Special Projects Staff, during 1982, consisted of the joint CIA-DIA Consolidated SAFE Project Office (CSPO) and the Automated Document Storage and Retrieval System (ADSTAR) Project. The latter project was essentially completed during 1982. The joint CIA-DIA SAFE Project Management Office consisted of approximately 32 CIA and 12 DIA positions with the Director, CSPO coming from CIA and Deputy Director from DIA. A major redirection of the SAFE Project occurred during 1982. The project evolved from a Burroughs Corporation computer system architecture to an IBM-compatible architecture and the developmental philosophy evolved from a software-intensive development approach to a lower-risk hardware-intensive integration approach using off-the-shelf software wherever possible. System capabilities will be delivered in phases, with the earliest CIA phase due in March 1983. This Early Capability (EC) will provide up to three hundred CIA analysts with the ability to screen, process, store and retrieve intelligence reports.

The activities of the Office of Data Processing are managed by a Director and Deputy Director, supported by a Management and Administrative Staff. Twenty-five full-time individuals are involved in these functions which include overall management guidance, policy formulation, planning, programming, and budgeting, in addition to logistics, personnel, training and registry services.

Table I: ODP Computer Facility Summary*

	1981	1982
25X1 [redacted]		
No. of CPUs	7	6
MIPS**	27	47
On-line Storage (GB)***	75	117
Special Center		
No. of CPUs	4	4
MIPS	10	15
On-line Storage (GB)	35	47
Northside Center (SAFE)		
No. of CPUs	--	6
MIPS	--	33
On-line Storage (GB)	--	38
4C		
No. of CPUs	--	1
MIPS	--	1
On-line Storage (GB)	--	5
25X1 CAMS [redacted]		
No. of CPUs	--	1
MIPS	--	3
On-line Storage (GB)	--	13
Total ODP		
No. of CPUs	11	18
MIPS	37	99
On-line Storage (GB)	110	220

* Generally year-end data, except as indicated.

** MIPS = Millions of Instructions per second (approx. measure of CPU speed).

*** GB = Gigabytes or billions of bytes (characters) of data; on-line storage data are fiscal year-end figures, except for Northside Center. Northside data are end of 1st Qtr. 1982 estimates.

III. 1982 PERFORMANCE HIGHLIGHTS

Last year, 1982, was a particularly dynamic year for the Office of Data Processing. The office operates in an ever changing technological environment. Advances in data processing continue apace and technical and managerial changes are the norm rather than the exception. An example of advancing technology and the resulting potential opportunities to improve Agency productivity is the commercial availability of secure, cost-effective office automation and word processing equipment. ODP managed a major competitive procurement for this type of equipment in 1982. Equipment from Wang Laboratories, Inc. was selected as the Agency standard. This equipment is now being introduced throughout the Agency with ODP's newly-formed Word Processing Branch acting as the central manager.

If there was a theme to 1982, it was change: rapidly changing Agency requirements and the ever changing data processing environment. In order to be effective in this environment, it is essential that the already high quality of ODP personnel be maintained and even enhanced. Quality personnel were the key to the accomplishments of 1982 and are clearly central to success in 1983 and beyond.

The following presents, in summary form, key ODP accomplishments for 1982. The accomplishments are generally organized by the responsible ODP component. This, however, is somewhat artificial, since most ODP activities involve close coordination of two or more ODP components.

Office-wide

A key highlight of 1982 was the passing of legislation which provides an exemption for CIA from the Brooks Bill (P.L. 89-306). This exemption legislation was included in the Intelligence Authorization Act of FY 1983 and signed into law on 27 September 1982. The Brooks Bill governs the administration of Automatic Data Processing (ADP) in the Federal Government and establishes the General Services Administration (GSA) as the central ADP equipment procurement and management agency. In addition, the Brooks Bill establishes the Federal ADP Standards Program, which is administered by the Department of Commerce. Since 1973, CIA has been operating under a blanket delegation of ADP procurement authority from GSA.

The unique nature of the intelligence environment --- its focus on security and the rapidly changing requirements --- made the cumbersome delegation approach increasingly less desirable. The dynamic nature of world affairs and intelligence requires that this Agency make maximum use of available technology to enhance effectiveness and improve productivity, and do so with a minimum of regulatory and bureaucratic controls. The Office of Data Processing along with other Agency components worked with

the Legislation Division of the Office of General Counsel to draft legislation, based on similar legislation obtained by the Department of Defense (DoD), to exempt Agency ADP activities from the purview of the Brooks Bill. With the signing of this legislation into law, Agency ADP activities henceforth will be managed via existing internal policies, procedures and regulations. These directly derive from the related DoD and GSA framework with appropriate modifications to fit the intelligence environment. In our judgment, the resulting legislation is a significant stride in improving security and management flexibility in Agency ADP activities. This has been achieved without compromising the goals of economy and efficiency in ADP management enunciated in the Brooks Bill.

ODP also played a key role in the development of Agency policy, based on security concerns, prohibiting the use of foreign ADP resources. ODP participated in the Agency-wide Secure Equipment Acquisition Policy Task Force. This task force developed a policy statement for DCI signature prohibiting the routine use of ADP resources manufactured on foreign soil or developed, manufactured or marketed by an organization under foreign ownership, control or influence. The DCI approved this policy on 2 March 1982 and the implementing regulations were subsequently promulgated. This policy significantly improves the Agency's position in controlling the introduction of foreign ADP resources which potentially pose a significant security vulnerability in the sensitive Agency computer environment.

Special Projects Staff

The key accomplishment of 1982 was the successful redirection of the joint CIA-DIA SAFE program. During the latter part of 1981, progress in the development of the SAFE system was disappointing. In early 1982, Agency management took forceful action to put the project back on track. Project management was changed; the planned use of Burroughs Corp. hardware was abandoned for IBM-compatible products; the use of commercially-available or Government-owned software was emphasized in lieu of development; and the development philosophy was altered to reflect an evolutionary rather than fixed requirements approach.

Existing operating system, utility and application software will be used to reduce the risk of implementing the SAFE Early Capability. Early Capability will be an enhanced version of the Pilot Mail Operation (PMO) system currently supported on IBM mainframes in the Ruffing Center. Therefore, IBM-compatible hardware will be procured and installed to support the Early Capability and subsequent SAFE Enhanced and Integrated Capabilities. Twisted-pair (Red) communication media will be used, in lieu of the originally planned wideband bus (CATV) communication media, to support terminal communications. Three separate systems (consisting of six IBM 3083J mainframes) will be placed into operation in the Northside Computer Center by the

Spring of 1983. The first system for CIA users, consisting of three mainframes, is currently being installed. The second system for DIA users, consisting of two IBM 3083J's, will be installed in early 1983. Communication facilities will be provided for the receipt of cable traffic and to permit DIA users to access the system from DIA installations. The third system, consisting of one IBM 3083J, will be installed during the first quarter of 1983 to provide backup capacity for DIA's system and support development of subsequent SAFE capabilities.

The SAFE Early Capability will provide Pilot Mail Operations to a community of up to three hundred DDI analysts by March 1983. These analysts will be able to receive relevant intelligence message traffic on-line, in an extremely timely fashion. They will, with Early Capability, be able to scan and search incoming messages, and subsequently file messages or route them to other analysts for review. Analysts will also have the capability to create and edit reports and memoranda on-line, and route or print items as required. SAFE Early Capability should prove to be a significant automated tool for the intelligence analyst. It should improve analyst productivity and result in more timely finished intelligence.

The SAFE system will evolve in phases. The DIA Early Capability is scheduled for May 1983. The delivery of the next major upgrade, the Enhanced Capability, is scheduled for October 1984; four subsequent major deliveries referred to as the Integrated Capabilities are scheduled for March 1985 through December 1987.

Major milestones in the Automated Document Storage and Retrieval (ADSTAR) Project were also reached. ADSTAR is a computer-assisted microfilm retrieval system. The Office of Central Reference (OCR) ADSTAR system was accepted in September 1982. By 1 October, the OCR system was in production. A second ADSTAR system is undergoing acceptance testing by the DDO. The test should be completed and production underway by early 1983.

Applications

CAMS

During 1982, work continued on both the current operational version of the COMIREX Automated Management System (CAMS1) and development of the enhanced version, CAMS2. Over 20 work-years of effort were devoted to CAMS1, which resulted in four major releases of software. Major system enhancements included support for a Dual Mode Collection System and development of the so-called "Virtual GIMS" facility --- a modification to the CAMS database management system, GIMS, which permits it to run under the VM timesharing system. This will permit large amounts of off-line data to be queried, searched and retrieved by the on-line system.

CAMS2 development progressed beyond the planning stage with the contractor, TRW, successfully reaching two major milestones: Preliminary System Design and the first phase of Detail System Design. There are currently approximately 70 TRW employees involved in this effort. In support of the CAMS2 development effort, the TRW facility ("W2" Building) was modified to house the CAMS2 development computer center. A Government-furnished IBM 370/168 computer was installed in late 1982, along with associated peripherals and communications equipment. The TRW computer facility is operated by ODP Processing personnel and consists of over 7,000 sq. ft. of shielded computer space.

Two new contracts were also awarded in 1982 in support of the CAMS effort. Computer Sciences Corporation (CSC) received a contract to develop software to transition the large CAMS1 database to CAMS2. CTEC, Inc. of McLean, Virginia, also was awarded a contract stemming from a competitive procurement, to provide quality assurance support to the CAMS2 effort. CTEC will provide the Government with an independent check of the primary development effort.

The CAMS2 Initial Operational Capability (IOC) is scheduled for May 1984.

4C

The Community-wide Computer Assisted Compartmentation Control System (4C), the Intelligence Community's (IC) special clearance database, was initially implemented for Agency-only use in October 1981. The 4C system has been running as a Generalized Information Management System (GIMS) database in [redacted] 25X1
[redacted] It is scheduled to be made available to the IC in March 25X1
1983. Security regulations require an electrically-isolated computer if non-Agency customers are serviced. In preparation for the community IOC, a new computer center site (Room 1A14, HQ) was prepared. An Agency-owned IBM 370/158 AP was reassigned to 4C and installed in this new center in December 1982. Additional equipment is scheduled for installation in time for the March 1983 IOC.

DESIST

The Decision Support and Information System for Terrorism (DESIST) development contract was awarded, based on a competitive procurement, to Booz, Allen in September 1982. DESIST will be used in direct support of the National Security Council (NSC) approved crisis management function intended to deal with terrorist incidents involving U.S. interests. DESIST will allow access to terrorist information by key Intelligence Community offices and operations centers. This access will provide users, at their own site, rapid query and printing capability in crisis

management situations or for research. The DESIST project is funded [redacted] and will require a total of 20 work-years of effort. IOC for DESIST is scheduled for the third quarter of 1984. 25X1

LIMS

Development activities continued on the Logistics Integrated Management System (LIMS). The LIMS Functional Requirements Document (FRD) was completed by Applications and Office of Logistics personnel. The Detailed Requirements Document is scheduled for completion in early 1983. CTEC, Inc., McLean, Virginia, was awarded, in October 1982, the LIMS quality assurance contract after a competitive procurement. In addition, the Request for Proposals for the LIMS development contract was released in late 1982. Award is expected in early 1983. LIMS IOC is scheduled for the second quarter of 1985.

ACIS

Development continued on the Automated Compensation and Information System (ACIS) with the publication of the Detailed System Requirements Document. This system will be primarily developed by ODP Applications personnel for security reasons. It is estimated that ACIS will require over 150 work-years of staff effort and an additional [redacted] contract support. IOC for ACIS is scheduled for the third quarter of 1984. 25X1

General

In its continuing effort to provide ADP systems support to the Agency and Intelligence Community, Applications received over 465 new requests for support, while closing out 485 during 1982. Although these figures are down somewhat from 1981 (570 received, 530 closed out), the workload continued to increase as several major development efforts were initiated. To accommodate this increasing major system development workload, Applications reorganized, in April 1982, into four major divisions: CAMS, Systems Development, Systems Support and Quality Assurance. It is believed this realignment will enhance expertise within the functional areas and provide for independent quality assurance reviews.

During 1982, training of ODP and Agency personnnel continued to be a high priority. Applications Training Staff conducted a total of 103 courses (18 unique). Over 385 ODP personnel and 116 personnel from other Agency components attended this training. In addition, 4 external courses were brought in-house under contract. Over 100 students attended these courses. In late 1982, most of the general ADP training functions were transferred

to the Information Science Center, Office of Training and Education. ODP retains a small training capability to provide ADP professionals with specialized technical training on ODP systems.

Processing

Office Automation

The key accomplishment for Processing in 1982 was the significant progress made in the Agency word processing and office automation program. Through the competitive procurement process, Wang Laboratories was awarded the Agency Standard Word Processor Contract. Processing's Engineering Division developed a very sophisticated Request for Proposal (RFP) based on consolidated Agency-wide word processing and office automation requirements. Wang offered three TEMPEST systems in response to the RFP: the Wang 7520 standalone system (includes a dual diskette drive and attaches up to a total of six workstations and/or printers); the Wang 7525 system (includes a desktop single diskette drive, 5 MB (millions of bytes or characters) hard disk and attaches up to a total of 14 workstations or printers); and the Wang Alliance system (Alliance attaches up to four 80 MB hard disk drives and up to a total of 32 workstations and/or printers.) All three systems proposed by Wang and ultimately selected through the competitive procurement process are TEMPEST as indicated by their presence on the National Security Agency's Preferred Products List. These Wang systems provide the Agency with an extremely cost-effective word processing and office automation standard --- Agency prices represent a 40 to 50 percent discount from GSA schedule prices.

The Agency Standard Word Processor Contract with Wang is of a requirements type. The contract is therefore for an undefined quantity of systems and Agency components are required to utilize the contract when the covered equipment meets their requirements. In order to administer the contract, ODP Processing established a Word Processing Branch consisting of nine personnel. This branch is responsible for advising Agency components ordering equipment; performing site surveys; centrally managing contractor maintenance support; coordinating with the contractor on hardware and software support, training and contractual issues. From the signing of the contract with Wang in early May 1982, through the end of the year, the Agency took delivery on 80 Alliance systems, 45 Wang 7525 systems and 25 Wang 7520 systems. These systems comprise 700 workstations and 340 printers.

Two other milestones in the ODP overall office automation program during 1982 were the establishment of a production environment for ODP's internally-developed electronic mail system, AIM, and development of a prototype host-based word processing system. The AIM or Automated Information Management

system provides users of the VM timesharing facility with the capability to create memoranda on-line and electronically sign and route the memoranda to designated recipients. Users of AIM receive notification of electronic mail in their "in-box" when they log on. At the end of 1982, there were 800 active users of AIM.

The prototype host-based word processing system is a user-friendly enhancement to existing word processing facilities on the VM timesharing system. The prototype software takes advantage of the capabilities of the Agency standard terminal, the Delta Data 7260. Agency ADP users will shortly have access to word processing facilities via Wang systems or through Delta Data 7260's connected to the VM system. In the near future, ODP plans to interconnect Wang systems to the VM timesharing system. This will permit users to create, route and receive documents via electronic mail from either Delta Data or Wang terminals. The resulting expansion of word processing and electronic mail users will be a key step in Agency-wide office automation.

Computer Center Upgrades

During 1982, Processing initiated or completed a significant number of activities designed to introduce the latest available technology and improved and more reliable services to an expanding and increasingly diverse base of customers. These activities included:

---Installation of two new IBM 3081D computers and one new 3081K computer [redacted] The 3081D's were installed to upgrade support to the Batch and VM services. The 3081K, the most powerful currently available processor in the IBM line, was introduced to upgrade GIMS support. Introduction of these three new highly reliable processors permitted the phase-out from [redacted] older IBM 370/168 technology. 25X1 25X1

---Introduction of new highly reliable and space-efficient IBM 3380 disk drives into [redacted] Special Centers. Use of highly space-efficient on-line storage is the only way of satisfying continually increasing on-line storage requirements with very limited available space. On-line disk storage increased 54 billion bytes (or characters) in 1982 in [redacted] Special Centers. Total on-line storage is now 117 billion bytes in the [redacted] and 47 billion bytes in the Special Center. Introduction of IBM 3380 disk drives in 1982 was the first step in the gradual phase out of all older technology disk equipment in [redacted] Special Centers. 25X1 25X1 25X1 25X1

---A record number of terminal actions (1090 for 1982 vs. 575 for 1981). In 1982, ODP personnel, in close coordination with personnel from the Offices of Communications and Logistics, performed 425 new installations, 420 relocations, 80 exchanges, and 160 upgrades and retirements.

---Because of the limited capacity of a single Central Processing Unit (CPU), it was necessary to establish a second VM timesharing system on an additional CPU. All DDI users were migrated from the VM1 CPU to the newly established VM2 CPU. Response time has improved on the previously overloaded VM1 as the effort to balance workload between CPU's continues. The splitting of VM also required that a single directory concept be developed and implemented. This permits VM users to read disk files supported by either VM system.

---Establishment of VM capability in the Special Center on a 370/158 AP CPU.

---Furnishing a Government-owned IBM 370/168 computer system to TRW for use in CAMS2 development. ODP personnel supervised the installation of the CPU [redacted] 25X1
[redacted] ODP is also providing the 25X1
required system software and operations personnel to man the facility on a 12-hour per day basis.

---Providing numerous software enhancements to the following ODP production system software: VM (Virtual Machine)---the timesharing system; MVS (Multiple Virtual Machine)---the batch and database operating system; GIMS (Generalized Information Management System)---the ODP database management system, developed by TRW and jointly maintained by ODP and TRW. These enhancements included major new releases of all of the above. In particular, a key enhancement was release 4.4 of GIMS, which was delivered in July 1982 to the CAMS2 development system at the TRW W2 facility. This represented the initial delivery of a VM-based GIMS system designed for a large mainframe environment.

Additional software enhancements included new communication software to facilitate the networking of word processors, VM and the Office of Logistics' printing and publishing facilities. New security enhancements were also provided to ODP systems with the expansion of the capabilities of the ACF2 dataset protection software and the implementation of the initial phase of the Document Logging System. The latter software will improve control of computer listings released to customers in [redacted] 25X1
and Special Centers.

---Converting the Technical Analysis Display System (TADS) to run under the current version of the VM operating system. This eliminated the requirement to support TADS on a dedicated computer system and to maintain an obsolete operating system. TADS is designed to support the signal analysis activities of OSWR analysts. Users have realized improved peformance as a result of the system being able to operate concurrently with other applications on a much more powerful central processor (currently VM2).

Production Statistics

Use of ODP resources continued to increase:

---The mean number of concurrent VM timesharing users increased from 325 in 1981 to 420 by year-end 1982. The total number of users with access to VM increased from [redacted] 25X1

---Ruffing Center Batch jobs increased from 3200 per day in 1981 to 3400 in 1982.

---Database responsibilities also expanded. GIMS Production databases increased to 43 by the end of 1982, from 38 in 1981. GIMS users also increased to approximately [redacted] in 1981. CAMS users also increased, from [redacted] in 1981 to approximately [redacted] by year-end 1982. Activity against production databases climbed approximately 20%. GIMS transactions per day increased to 18,000 in 1982 from 15,000 in 1981. CAMS daily transactions in 1982 increased to 22,000 from a 1981 figure of 18,000. 25X1 25X1

---In the Special Center, the average number of DDO batch jobs increased from 2,000 per week in 1981 to 4,000 per week by year-end 1982. The weekly transaction rate for the STAR (Special Trace and Retrieval) system increased from 50,000 to 60,000 from 1981 to 1982.

---Availability also evidenced continuing improvement in 1982. VM, Batch and CAMS exceeded the 98% threshold for the first time. In addition, the GIMS Production system exceeded 97% availability.

IV. RELATIONS WITH CUSTOMERS

ODP's major customers are primarily internal to CIA. The Project Activity Report (PAR) system is the primary ODP tool for measurement of ODP resource utilization by customer components. The top ten users of ODP services along with percentage of ODP resources consumed are displayed in Table II.

ODP's major non-CIA customers are the Defense Intelligence Agency (DIA) for Project SAFE and the Office of Imagery Collection and Exploitation (O/ICE) of the Intelligence Community Staff for CAMS. Additional Intelligence Community projects are DESIST and 4C. ODP processing services also continued to be used in support of other Government Agencies.* In Fiscal Year 1982, 85% of the 396,000 name traces performed by the DDO in the Special Center were for other agencies. Similarly, the Office of Security performed, using ODP systems, 81,000 investigative name checks for other Government agencies, primarily the Department of Defense and FBI. About 17% of the 6,900 queries of the Office of Central Reference (OCR) on-line bibliographic database were for other agencies, primarily NSA. In addition, of 1,900 biographic information searches performed by OCR using an ODP developed system, 32% were based on requests from non-CIA sources.

As may be seen from the above, ODP provides significant support to non-CIA customers, both in the form of direct support of inter-agency projects and indirectly, through its support of CIA customers with inter-agency responsibilities. In the case of ODP's CIA and non-CIA customers, our relationships have always generally been positive and supportive. In this regard, 1982 was no different. We are aware of no major organizational problems in the past and do not expect any in the future.

*Data are for FY 1982

Table II: FY 1982 ODP Resource Consumption by Office

Rank	Customer	% ODP Resources Used in FY 1982*
1.	OICE/ICS	21.9
2.	OD&E/DDS&T	12.2
3.	OSWR/DDI	9.8
4.	OCR/DDI	8.4
5.	OL/DDA	6.5
6.	IMS/DDO	5.8
7.	OF/DDA	5.1
8.	OP/DCI	3.6
9.	ODP/DDA	3.0
10.	OCPAS/DDI	2.8
	TOTAL	79.2

*Percent Fiscal Year 1982 dollar costs for computer processing support and personnel; excludes Consolidated SAFE Project Office funds. Total less than 100% because of unlisted offices.

V. FUTURE RESEARCH AND DEVELOPMENT PLANS*

Research and Development (R&D) in support of ODP requirements is typically performed by the Information Systems Research Division (ISRD) of the Office of Research and Development, DDS&T. ISRD supports Agency-wide R&D in information systems. Most of these projects support several Agency customers with common requirements, so unique research in support of ODP is generally very limited. The DDS&T typically solicits R&D requirements throughout the Agency and consolidates the resulting requirements for S&T component planning purposes. ODP provides inputs to S&T planning through its participation in the DDA R&D Panel. This panel consolidates and prioritizes DDA R&D requirements, which are primarily from the Offices of Communications (OC), Data Processing and Security (OS). Because of the necessary budgetary and planning lead time, the panel typically deals with requirements two fiscal years in advance. For example, during the first quarter of FY 1983, requirements for FY 1985 were under review. As has been typical in recent DDA R&D Panel planning exercises, the focus of directorate interest was on computer security (or, more broadly, information handling security) issues. The Offices of Data Processing and Security jointly supported most of these initiatives. A second area of research concern of significant interest to ODP and OC is ADP communications strategies for the Headquarters area.

In FY 1982, ORD performed the following research with ODP considered the customer contact:

---Guard System Technology (Post-RECON)
A security technique that would permit the sharing of RECON (the Agency intelligence bibliographic database) with Intelligence Community users was developed in FY 1981 and 1982. This technique, referred to as RECON Guard, utilizes a separate Guard processor to screen data provided to non-Agency users. In FY 1983, ORD will develop enhanced security filtering or auto dissemination methods using the RECON Guard system.

---Advanced Text Retrieval
The goal of this project is to develop and implement a mechanism for assessing alternative text search approaches, applications and devices. In FY 1982, Agency requirements were investigated and a testbed designed. The goal in FY 1983 is to develop a prototype retrieval testbed, merging hardware and software search capabilities and to test against Agency applications.

*This section does not address system and software development or implementation which are ongoing ODP functions. R&D, as used above, is defined as research and/or advanced development in new ADP technologies.

---Database Management
Developing and implementing a general-purpose deductive inferencing mechanism for use with existing data bases is the focus of this project. It utilizes System Development Corporation's Deductively Augmented Data Manager software. In FY 1982, feasibility was demonstrated and an application selected. The FY 1983 goal is to develop an Agency application with an existing VM database.

---System Design Evaluation Methodologies
The goal of this project is to develop a general-purpose system simulator facility to permit evaluation of system design and hardware configuration alternatives utilizing the University of Maryland System Technology Evaluation Package. In FY 1982, the performance prediction characteristics of the package were evaluated with VM. In FY 1983, a specific simulation scenario (CAMS2) will be studied.

In direct support of other offices, but also of interest to ODP, were the following two projects:

---Data Communications
This project involved an investigation of the feasibility of fiber-optics bus technology in support of OC. It began in FY 1983.

---Audit Trail
The purpose of this effort is to improve the capability to monitor computer systems, through the use of audit trail data, to detect improper use. This project began in FY 1982 in support of OS.

VI. PRESENT/PROJECTED RESOURCE NEEDS

A summary of ODP's actual (FY 1982) and projected resource needs is presented below:

ODP	FY 1982	FY 1983	FY 1984
Funds*			
Personnel			
Work-years			
Positions			

25X1

*Dollars in thousands.
**Reflects transfer of non-personal services for CAMS to the IC budget.

During the next several fiscal years, resource requirements will continue to expand. In the personnel area, increases are

due to the expanding number and complexity of major applications development projects and SAFE and CAMS operations activities. The requirement to replace and enhance our existing corporate DDA software systems is a key factor in applications development growth. This major software recapitalization effort involves new systems, such as the Automated Compensation Information System (ACIS); the Logistics Integrated Management System (LIMS); The Records Information System (TRIS); the Personnel Resources Information Management System (PRIM); the Integrated Financial Management System (IFMS); and the Security Information Management System (SIMS). Development associated with ACIS and CAMS, as well as the general applications workload increase, will require approximately thirty-five additional ODP personnel in FY 1983 and 84. (Non-personal services funds will also be required for those applications efforts that are developed under contract but are not component funded). Approximately forty-five additional personnel will also be required for SAFE support, as that system becomes operational in FY 1983 and 84. During that same time period, CAMS and general support will absorb approximately twenty new positions.

Processing requirements will also continue to grow in FY 1983 and 84. Funding will be required for five additional CPU's, excluding SAFE. Additional hardware will be required to support the increasing quantity and complexity of ODP- and user-developed software. The workload and on-line storage requirements for VM timesharing, in particular, will continue to expand. This will necessitate continuing investment in more powerful mainframes and additional terminals, disks and other peripheral equipment.

Two additional significant factors in the continuing increase of hardware and system software support are: the requirement for near-perfect availability as more and more time-critical Agency activities are on-line; and the importance of office automation to improving Agency effectiveness and productivity. The former will require continuing ODP investment in state-of-the-art hardware, software and associated support. The latter, since the office equipment will be component-funded, will primarily require ODP to develop system and communications software and further enhance the VM timesharing service which is a critical node in the Agency office automation network. Critical to the success of the Agency office automation program will be the availability of highly-skilled systems programming and engineering personnel.

An additional important resource issue with significant impact on ODP programs is physical space availability. In order to perform its mission, ODP will require additional space for ADP equipment and for personnel, both staff and contractor. Expanding ADP requirements and programs consume large amounts of computer-grade Headquarters area space. The trend to contracting out major ADP development activities requires office space be provided for cleared contractor personnel who must have access to ODP computer facilities.

Actual (FY 1982) and projected space requirements are as follows:

	FY 1982	FY 1983	FY 1984
Office Space	11,600	8,800	9,250
Computer-Grade Space	2,500	-	6,400
Total	14,100	8,800	15,650

ODP's most important resource is talented, motivated and trained personnel. Expanding ADP requirements in system development and processing services require that ODP recruit additional highly-skilled personnel and retain and continue to rigorously train its existing staff. A highly competitive marketplace for individuals with strong ADP skills, and particularly with Agency and special clearances, makes this an increasingly more difficult problem. In our favor is an ever-expanding applications development portfolio of highly challenging state-of-the-art ADP projects and programs. Maintaining an atmosphere of high technology, excitement, growth and opportunity is essential to retaining and enhancing our personnel base. Creating and sustaining this environment will be a key challenge of the Eighties.